

Message

From: Hager, Aaron G [hager@illinois.edu]
Sent: 8/28/2020 5:31:19 PM
To: Chism, William [Chism.Bill@epa.gov]
Subject: RE: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Bill:

Pat Tranel just sent me the following additional information related to the waterhemp population his lab is working with.

So talking to Lucas jogged my memory, and we have a lot more than what I was remembering. Replicated dose response experiments indicate about a 5- to 10-fold level of resistance compared to S population. It's still not very resistant relevant to a field rate (at least in our greenhouse conditions), but clearly reduced sensitivity. And we have solid genetic data as well, with individuals from F2 populations clearly segregating for differential dicamba sensitivity.

Best wishes,

Aaron

From: Chism, William <Chism.Bill@epa.gov>
Sent: Friday, August 28, 2020 11:37 AM
To: Jha, Prashant [AGRON] <pjha@iastate.edu>; Hartzler, Robert G [AGRON] <hartzler@iastate.edu>; lee.vanwychen@wssa.net; Hager, Aaron G <hager@illinois.edu>; wgj@purdue.edu; bradleyke@missouri.edu; Tindall, Kelly <tindall.kelly@epa.gov>
Subject: RE: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Hi Everyone

Thanks for all the information and for describing what is clearly not a simple picture. This will be helpful in our biological analysis.

Thank you. Bill

Bill Chism, Ph.D.
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Biological and Economic Analysis Division
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PII
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From: Jha, Prashant [AGRON] <pjha@iastate.edu>
Sent: Friday, August 28, 2020 12:18 PM
To: Hartzler, Robert G [AGRON] <hartzler@iastate.edu>; Chism, William <Chism.Bill@epa.gov>; lee.vanwychen@wssa.net; hager@illinois.edu; wgj@purdue.edu; bradleyke@missouri.edu; Tindall, Kelly <tindall.kelly@epa.gov>
Subject: Re: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Thanks Bob.

Yes, we have good many populations collected from Iowa corn/soybean fields that survived the field use rate of dicamba (Xtendimax) and they are producing seed, which we will use for further screening to detect resistance.

Similar observations/results in our field trials here in IA. Will investigate further.

Regards,
Prashant

Prashant Jha

Associate Professor & Extension Weed Specialist



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Email: pjha@iastate.edu

From: Hartzler, Robert G [AGRON] <hartzler@iastate.edu>

Sent: Friday, August 28, 2020 8:39 AM

To: Chism, William <Chism.Bill@epa.gov>; lee.vanwychen@wssa.net <lee.vanwychen@wssa.net>; hager@illinois.edu <hager@illinois.edu>; wgj@purdue.edu <wgj@purdue.edu>; bradleyke@missouri.edu <bradleyke@missouri.edu>; Tindall, Kelly <tindall.kelly@epa.gov>

Cc: Jha, Prashant [AGRON] <pjha@iastate.edu>

Subject: Re: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Bill,

Hope things are going well. We are not aware of any dicamba resistant weeds in Iowa. However, Prashant is running a resistance screen of weeds across the state (primarily waterhemp) to multiple herbicide groups. He did find levels of survival to dicamba that are of concern in several of the waterhemp populations that were screened, and is evaluating them further.

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From: "Chism, William" <Chism.Bill@epa.gov>

Date: Friday, August 28, 2020 at 8:06 AM

To: "lee.vanwychen@wssa.net" <lee.vanwychen@wssa.net>, Bob Hartzler <hartzler@iastate.edu>, "hager@illinois.edu" <hager@illinois.edu>, William Johnson <wgj@purdue.edu>, Kevin Bradley <bradleyke@missouri.edu>, "Tindall, Kelly" <tindall.kelly@epa.gov>

Subject: Any Update on Dicamba Resistance in Waterhemp or Other Weeds

Hello Gentlemen

The Office of Pesticide Programs is working on the registration of over-the-top dicamba for cotton and soybeans. We have found some new reports of dicamba resistance in Palmer amaranth but very little discussion of waterhemp. In 2019 there was a short description of dicamba-resistant waterhemp in the Progressive Farmer (below). Is there anything you can share about dicamba-resistant waterhemp? Are there any other weed species that you are aware of where dicamba is showing signs of potential resistance?

Thank you. Bill Chism

<https://www.dtnpf.com/agriculture/web/ag/crops/article/2019/08/30/possible-dicamba-resistance-cropping>

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